

CLAIMS

1. Drive train for powering a mobile vehicle with a drive engine (1), which powers on the one hand the drive input of a propulsion drive via a shiftable step-down transmission (12) and on the other hand an auxiliary drive output for driving at least one hydraulic pump (5), characterized in that before the auxiliary drive output there is arranged a transmission gear which adjusts the transmission ratio as a function of a required delivery volume of the hydraulic pump (5) and as a function of the speed and of a load condition of the drive engine (1).

2. Drive train according to claim 1, characterized in that the step-down transmission is continuously adjustable.

3. Drive train according to claim 1, characterized in that in full-load operation below a defined speed of the drive engine (1), the transmission gear is adjusted to a higher transmission ratio so that the drive input speed of the hydraulic pump (5) decreases.

4. Drive train according to claim 1, characterized in that in part-load operation below a defined speed of the drive engine (1), the transmission gear is adjusted to a lower transmission ratio so that the drive input speed of the hydraulic pump (5) increases.

5. Drive train according to claim 1, characterized in that in full-load operation below a defined speed of the drive engine (1) and delivery volume requirement of the hydraulic pump (5), a clutch (2) arranged between the hydrodynamic converter (4) and the drive engine (1) is actuated in the opening direction as far as to result in a defined minimum speed of the drive engine.

6. Drive train for powering a mobile vehicle with a drive engine (1), which powers on the one hand a shiftable step-down transmission (12) for driving the propulsion drive via a hydrodynamic converter (4) and on the other hand an auxiliary drive output for driving at least one adjustable hydraulic pump (5), characterized in that the adjustable hydraulic pump (5) is adjusted as a function of a required delivery volume of the hydraulic pump (5) and as a function of the speed and of a load condition of the drive engine.

7. Drive train according to claim 6, characterized in that the hydraulic pump can be adjusted continuously.

8. Drive train according to claim 6, characterized in that in full-load operation below a defined speed of the drive engine (1) the hydraulic pump (5) is adjusted to deliver a smaller volume flow.

9. Drive train according to claim 6, characterized in that in part-load operation below a defined speed of the drive engine (1) the hydraulic pump (5) is adjusted to deliver a larger volume flow.

10. Drive train according to claim 6, characterized in that in full-load operation below a defined speed of the drive engine (1) and delivery volume requirement of the hydraulic pump (5), a clutch (2) arranged between the hydrodynamic converter (4) and the drive engine (1) is actuated in the opening direction as far as to result in a defined minimum speed of the drive engine.